Name of Work: Modified estimate for Remodeling of SWD BP 026 (BY03) from BB Nagara, Kodigehalli to H-200 primary drain near Nagashettihalli main road in ward no.08, in Yelahanka Zone

BRUHATH BANGALORE MAHANAGARA PALIKE

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Item No	Description	Unit	No.	L	B	D	Qty.	Rate	Amount
	Diversion of water course by providing Coffer dams or bunds or islands as may be necessary for piers and abutments foundations, bailing out or pumping water during excavation and until completion etc., including all lead and lift etc., complete as per the directions of Engineer in charge of work.								
	Date of Recording :								
1	From Ch:747.60m to 717.60m	Cum	1	30.00	(1.85+1.90)/2	(1.90+1.80)/2	104.06		
	From Ch:717.60m to 687.60m		1	30.00	(1.90+1.70)/2	(1.80+1.75)/2	95.85		
	From Ch: 687.60m to 657.60m		1	30.00	(1.70+1.75)/2	(1.75+1.70)/2	89.26		
	From Ch:657.60m to 627.60m		1	30.00	(1.75+1.70)/2	(1.70+1.70)/2	89.97		
	From Ch:627.60m to 597.60m		1	30.00	(1.70+1.50)/2	(1.70+1.50)/2	76.80		
	From Ch:597.60m to 590.60m		1	7.00	(1.50+1.00)/2	(1.50+1.00)/2	10.93		
						Total Qty	466.87	340.00	158735.80
	Earth work in excavation for foundation of structures as per drawing and technical specifications, including setting out, construction of shoring and bracing, removal of stumps and other deleterious matter, dressing of sides and bottom and backfilling with approved material complete as per specifications. "V. Marshy soil - A.Manual Means upto 3 m depth . MORTH Specification								
	Measurement Contd. on :								
2	From Ch:747.60m to 717.60m	Cum	1	30.00	3.60	(0.60+0.70)/2	70.20		
	From Ch:717.60m to 687.60m		1	30.00	3.60	(0.65+0.70)/2	72.90		
	From Ch: 687.60m to 657.60m		1	30.00	3.60	(0.65+0.70)/2	72.90		
	From Ch:657.60m to 627.60m		1	30.00	3.50	(0.70+0.65)/2	70.87		
	From Ch:627.60m to 597.60m		1	30.00	3.20	(0.65+0.55)/2	57.60		
	From Ch:597.60m to 590.60m		1	7.00	3.00	(0.55+0.50)/2	11.02		
						Total Qty	355.49	120.00	42658.80
	Dismantling of existing structures like culverts, bridges retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work including T & P and scaffolding wherever necessary sorting the dismantled material, disposal of unserviceable material and stacking the serviceable material with all lifts complete as per specifications.(Prestressed/reinforced cement concrete grade M20 and above)								
3	Measurement Contd. on :								
	RCC Slab Ch: 595.00m to 605.7.00m	Cum	1	10.70	7.70	0.30	24.72		
			1	6.00	4.00	0.30	7.20		31600.80
		Cum				Total Qty	31.92	990.00	31597.83
	Dismantling of existing structures like culverts, bridges retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work including T & P and scaffolding wherever necessary sorting the dismantled material, disposal of unserviceable material and stacking the serviceable material with all lifts and lead of 1000 metres complete as per specification.iii) Dismantling Stone Masonry. B.Rubble Stone masonry in cement mortar								
4	Measurement Contd. on :								
	From Ch:747.60m to 717.60m	Cum	2	30.00	(0.45+0.60)/2	1.00	31.50		
	From Ch:717.60m to 687.60m		2	30.00	(0.45+0.60)/2	1.00	31.50		
	From Ch: 687.60m to 657.60m		2	30.00	(0.45+0.60)/2	1.00	31.50		
	From Ch:657.60m to 627.60m		2	30.00	(0.45+0.60)/2	1.00	31.50		
	From Ch:627.60m to 597.60m		2	30.00	(0.45+0.60)/2	1.00	31.50		
	From Ch:597.60m to 590.60m		2	7.00	(0.45+0.60)/2	1.00	7.35		
						Total Qty	164.85	230.00	37915.50
	Dismantling of existing structures like culverts, bridges retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work including T & P and scaffolding wherever necessary sorting the dismantled material, disposal of unserviceable material and stacking the serviceable material with all lifts and lead of 1000 metres complete as per specification.Cement concrete Grade M-15 & M-20								
5	From Ch:747.60m to 717.60m	Cum	1	30.00	(3.40+3.50)/2	(0.25+0.20)/2	23.28		
	From Ch:717.60m to 687.60m		1	30.00	(3.50+3.40)/2	(0.20+0.25)/2	23.28		
	From Ch: 687.60m to 657.60m		1	30.00	(3.40+3.50)/2	(0.25+0.30)/2	28.46		
	From Ch:657.60m to 627.60m		1	30.00	(3.50+3.40)/2	(0.30+0.25)/2	28.46		
	From Ch:627.60m to 597.60m		1	30.00	(3.40+3.50)/2	(0.25+0.25)/2	25.87		
	From Ch:597.60m to 590.60m		1	7.00	(3.50+3.00)/2	(0.25+0.25)/2	5.68		
						Total Qty	135.03	350.00	47260.50

Item No	Description	Unit	No.	L	B	D	Qty.	Rate	Amount
6	Earth work in excavation for foundation of structures as per drawing and technical specifications, including setting out, construction of shoring and bracing, removal of stumps and other deleterious matter, dressing of sides and bottom and backfilling with approved material complete as per specifications. B. Mechanical Means (i) Depth upto 3 m. MORTH Specification No.Section 304								
	Measurement Contd. on :								
	From Ch:747.60m to 717.60m	Cum	1	30.00	(5.60+5.40)/2	2.65	437.25		
	From Ch:717.60m to 687.60m		1	30.00	5.50	(2.65+2.60)/2	433.12		
	From Ch: 687.60m to 657.60m		1	30.00	(5.50+5.40)/2	2.60	425.10		
	From Ch:657.60m to 627.60m		1	30.00	(5.60+5.70)/2	(2.60+2.45)/2	427.98		
	From Ch:627.60m to 597.60m		1	30.00	(5.70+5.40)/2	(2.45+2.40)/2	403.76		
	From Ch:597.60m to 590.60m		1	7.00	(5.40+5.30)/2	2.40	89.88		
	Deduct existing drain		-1	157.00	3.50	1.00	-549.5		
	side Drain below approach slab	Cum	1	7.70	1.80	(1.55+1.60)/2	21.82		
	Deduct for existing drain		-1	7.70	0.80	0.80	-4.93		
	Road side drain Mega arts road LHS		1	8.20	0.85	(1.20+1.25)/2	8.54		
	Deduct for existing drain		-1	8.20	0.45	0.45	-1.66		
	Mega arts road RHS		1	9.30	0.85	(1.20+1.25)/2	9.68		
	Deduct for existing drain		-1	9.30	0.45	0.45	-1.88		
	For Approach slab, ORR to Kodigehalli Main road		1	5.40	(1.40+1.60)/2	(0.45+0.40)/2	3.44		
			1	5.50	(1.60+3.80)/2	(0.45+0.40)/2	6.31		
			1	7.70	12.80	(0.45+0.40)/2	41.89		
			1	1.90	12.40	(0.45+0.40)/2	10.01		
			1	21.50	(3.00+4.50)/2	(0.45+0.40)/2	34.27		
						Total Qty	1795.08	44.00	78983.52
7	Providing and Filling in foundation with granite/trap broken metal 100mm. and down size, with approved sand including hand packing, ramming, watering, including cost of all materials and labour with lead upto 50m and lift of 1.5m complete as per specifications								
	Measurement Contd. on :								
	From Ch:747.60m to 717.60m		1	30.00	(4.90+5.10)/2	(0.28+0.32)/2	45.00		
	From Ch:717.60m to 687.60m	Cum	1	30.00	(5.10+5.00)/2	(0.32+0.28)/2	45.45		
	From Ch: 687.60m to 657.60m		1	30.00	5.00	(0.28+0.32)/2	45.00		
	From Ch:657.60m to 627.60m		1	30.00	(5.00+4.90)/2	(0.32+0.28)/2	44.55		
	From Ch:627.60m to 597.60m		1	30.00	(4.90+5.10)/2	(0.28+0.32)/2	45.00		
	From Ch:597.60m to 590.60m		1	7.00	(5.10+4.80)/2	(0.32+0.28)/2	10.39		
	side drain below approach	Cum	1	7.70	1.80	(0.28+0.32)/2	4.16		
						Total Qty	239.56	2000.00	479100.00
8	Plain cement concrete M 10 with OPC cement @ 220 kgs with crushed 40m and down size graded grantie metal coarse aggregates @ 0.84 cum and fine aggregates @ 0.56 cum in foundation mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days complete as per specifications								
	Measurement Contd. on :								
	From Ch:747.60m to 717.60m		1	30.00	(4.90+5.10)/2	(0.14+0.16)/2	22.50		
	From Ch:717.60m to 687.60m	Cum	1	30.00	(5.10+5.00)/2	(0.16+0.14)/2	22.72		
	From Ch: 687.60m to 657.60m		1	30.00	5.00	(0.14+0.16)/2	22.50		
	From Ch:657.60m to 627.60m		1	30.00	(5.00+4.90)/2	(0.16+0.14)/2	22.27		
	From Ch:627.60m to 597.60m		1	30.00	(4.90+5.10)/2	(0.14+0.16)/2	22.50		
	From Ch:597.60m to 590.60m		1	7.00	(5.10+4.80)/2	(0.16+0.14)/2	5.19		
	drain below approach	Cum	1	7.70	1.80	0.10	1.38		
	Mega arts road LHS		1	8.20	0.85	0.10	0.69		
	Mega arts road RHS		1	9.30	0.85	0.10	0.79		
						Total Qty	120.54	5300.00	638864.65
9	PCC M15 Grade leveling course below approach slab complete as per drawings and technical specifications complete as per specifications. MORTH specification No.2700 with all lead and lifts as directed by the Engineer-in-charge.								
	Measurement Contd. on :								
	For Approach slab, ORR to Kodigehalli Main road		1	5.40	(1.40+1.60)/2	0.15	1.22		
			1	5.50	(1.60+3.80)/2	0.15	2.23		
			1	7.70	12.80	0.15	14.78		
			1	1.90	12.40	0.15	3.53		
			1	21.50	(3.00+4.50)/2	0.15	12.09		
						Total Qty	33.85	5500.00	186198.38

Item No	Description	Unit	No.	L	B	D	Qty.	Rate	Amount
10	Plain / Reinforced Cement concrete in open foundation with OPC cement design mix M35 @ 390 kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.68 cum and fine aggregates @ 0.45 cum with superplastisiser @ 3lts confirming to IS 9103-1999 Reaffirmed-2010complete as per drawing and technical specification. Case-II : With Batching Plant, Transit Mixer and Concrete Pump								
	Measurement Contd. on :								
	Raft	Cum							
	From Ch:747.60m to 717.60m		1	30.00	4.90	(0.48+0.50)/2	72.03		
	From Ch:717.60m to 687.60m		1	30.00	4.90	(0.50+0.48)/2	72.03		
	From Ch: 687.60m to 657.60m		1	30.00	4.90	(0.48+0.50)/2	72.03		
	From Ch:657.60m to 627.60m		1	30.00	4.90	(0.50+0.48)/2	72.03		
	From Ch:627.60m to 597.60m		1	30.00	4.90	(0.48+0.50)/2	72.03		
	From Ch:597.60m to 590.60m		1	7.00	4.90	(0.50+0.48)/2	16.80		
	Bottom Haunches		2x1/2	157.00	0.30	0.30	14.13		
	Raft	Cum	1	7.70	1.80	(0.38+0.40)/2	5.40		
			1	8.20	0.85	(0.23+0.25)/2	1.57		
			1	9.30	0.85	(0.23+0.25)/2	1.78		
						Total Qty	399.83	6150.00	2458954.50
11	Design mix M 35 with OPC cement @ 390kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.68cum and fine aggregates @ 0.45 cum, with superplastisiser @ 3lts confirming to IS9103-1999 Reaffirmed-2008 i) upto 5m height								
	Measurement Contd. on :								
	Walls	Cum							
	From Ch:747.60m to 717.60m		2	30.00	(0.38+0.40)/2	1.40	32.76		
	From Ch:717.60m to 687.60m		2	30.00	(0.40+0.38)/2	1.40	32.76		
	From Ch: 687.60m to 657.60m		2	30.00	(0.38+0.40)/2	1.40	32.76		
	From Ch:657.60m to 627.60m		2	30.00	(0.40+0.38)/2	1.40	32.76		
	From Ch:627.60m to 597.60m		2	30.00	(0.38+0.40)/2	1.40	32.76		
	From Ch:597.60m to 590.60m		2	7.00	(0.40+0.38)/2	1.40	7.64		
	Top Haunches		2x1/2	157.00	0.30	0.30	14.13		
	Walls	Cum	2	7.70	0.30	0.80	3.69		
			2	8.20	0.20	0.90	2.95		
			2	9.30	0.20	0.90	3.34		1349295-01
						Total Qty	195.55	6900.00	1349308.80
12	Furnishing and Placing Reinforced / Prestressed cement concrete in super-structure as per drawing and Technical Specification complete as per specifications. D.RCC/PSC with OPC cement design mix M35 @ 390kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.68cum and fine aggregates @ 0.45cum, with superplastisiser @ 3lts confirming to IS9103-1999 Reaffirmed-2008. Case-II : Using Batching plant, Transit mixer &								
	Measurement Contd. on :								
	Deck slab	Cum							
	From Ch:747.60m to 723.60m		1	24.00	4.50	(0.44+0.45)/2	48.06		
	From Ch:723.60m to 699.60m		1	24.00	4.50	(0.45+0.44)/2	48.06		
	From Ch:699.60m to 675.60m		1	24.00	4.50	(0.44+0.45)/2	48.06		
	From Ch:675.60m to 651.60m		1	24.00	4.50	(0.45+0.44)/2	48.06		
	From Ch:651.60m to 627.60m		1	24.00	4.50	(0.44+0.45)/2	48.06		
	From Ch:627.60m to 605.60m		1	18.00	4.50	(0.45+0.44)/2	36.05		
	From Ch:605.60m to 590.60m		1	19.00	4.50	(0.44+0.45)/2	38.05		
	Cover slabs		12	1.50	0.60	0.25	2.70		
	Parapet wall		1	4.85	(0.40+0.20)/2	1.20	1.74		
			1	4.85	0.90	0.15	0.65		
	Utility crossing/utility crossing		1	4.85	0.30	0.20	0.29		
	Bracket to rest approach slab		2	19.30	(0.20+0.25)/2	(0.30+0.25)/2	2.38		
	Deduct for openings								
	Openings		-6	1.20	1.20	0.20	-1.73		
			-6	1.50	1.20	0.25	-2.70		
	Deck slab below approach	Cum	1	7.70	1.40	0.20	2.15		
	Near High mast		1	2.60	1.60	0.10	0.41		
	Near Mega Arts road Slab		1	2.30	0.80	0.20	0.36		
	Pre-cast slabs		12	1.35	0.60	0.15	1.45		
							322.10	7000.00	2254701.75
							322.08		2254560-0

Item No	Description	Unit	No.	L	B	D	Qty.	Rate	Amount
13	Supplying, fitting and placing TMT bar reinforcement in sub-structure as per drawing and Technical Specifications complete as per specifications.								

Sl.No	Item/Bar nor	Dia of bar	length in mtr	spacing	no of bars	total length	wt/m	total wt in Kgs	Remarks
a	Ch:747.60m to 717.60m								
	Raft width-4.90m				Wall Height-1.40m			Length-30.00 m	
	1	16	6.40	175 c/c	171	1094.40	1.58	1729.15	
	2	16	5.60	75 c/c	400	2240.00	1.58	3539.20	
	3&4	10	29.90	175 c/c	56	1674.40	0.62	1038.13	2x28
	5	10	1.60	175 c/c	684	1094.40	0.62	678.53	2x2x171
	6	16	3.05	175 c/c	342	1043.10	1.58	1648.10	2x171
	7	16	5.05	175 c/c	342	1727.10	1.58	2728.82	2x171
	8&9	10	29.90	175 c/c	32	956.80	0.62	593.22	2x2x8
								11955.14	
b	From Ch:717.60m to 687.60m								
	Raft width-4.90m				Wall Height-1.40m			Length-30.00 m	
	1	16	6.40	175 c/c	171	1094.40	1.58	1729.15	
	2	16	5.60	75 c/c	399	2234.40	1.58	3530.35	
	3&4	10	29.95	175 c/c	56	1677.20	0.62	1039.86	2x28
	5	10	1.60	175 c/c	684	1094.40	0.62	678.53	2x2x171
	6	16	3.05	175 c/c	342	1043.10	1.58	1648.10	2x171
	7	16	5.05	175 c/c	342	1727.10	1.58	2728.82	2x171
	8&9	10	29.95	175 c/c	32	958.40	0.62	594.21	2x2x8
								11949.02	
c	From Ch: 687.60m to 657.60m								
	Raft width-4.90m				Wall Height-1.40m			Length-30.00 m	
	1	16	6.40	175 c/c	170	1088.00	1.58	1719.04	
	2	16	5.60	75 c/c	401	2245.60	1.58	3548.05	
	3&4	10	29.90	175 c/c	56	1674.40	0.62	1038.13	2x28
	5	10	1.60	175 c/c	684	1094.40	0.62	678.53	2x2x171
	6	16	3.05	175 c/c	342	1043.10	1.58	1648.10	2x171
	7	16	5.05	175 c/c	342	1727.10	1.58	2728.82	2x171
	8&9	10	29.90	175 c/c	32	956.80	0.62	593.22	2x2x8
								11953.88	
d	From Ch:657.60m to 627.60m								
	Raft width-4.90m				Wall Height-1.40m			Length-30.00 m	
	1	16	6.40	175 c/c	171	1094.40	1.58	1729.15	
	2	16	5.60	75 c/c	400	2240.00	1.58	3539.20	
	3&4	10	29.90	175 c/c	56	1674.40	0.62	1038.13	2x28
	5	10	1.60	175 c/c	684	1094.40	0.62	678.53	2x2x171
	6	16	3.05	175 c/c	342	1043.10	1.58	1648.10	2x171
	7	16	5.05	175 c/c	342	1727.10	1.58	2728.82	2x171
	8&9	10	29.90	175 c/c	32	956.80	0.62	593.22	2x2x8
								11955.14	
e	From Ch:597.60m to 590.60m								
	Raft width-4.90m				Wall Height-1.40m			Length-30.00 m	
	1	16	6.40	175 c/c	171	1094.40	1.58	1729.15	
	2	16	5.60	75 c/c	399	2234.40	1.58	3530.35	
	3&4	10	29.90	175 c/c	56	1674.40	0.62	1038.13	2x28
	5	10	1.60	175 c/c	684	1094.40	0.62	678.53	2x2x171
	6	16	3.05	175 c/c	342	1043.10	1.58	1648.10	2x171
	7	16	5.05	175 c/c	342	1727.10	1.58	2728.82	2x171
	8&9	10	29.90	175 c/c	32	956.80	0.62	593.22	2x2x8
								11946.29	
g	From Ch:597.60m to 590.60m								
	Raft width-4.90				Wall Height-1.40m			Length-7.00 m	
	1	16	6.40	175 c/c	40	256.00	1.58	404.48	
	2	16	5.60	75 c/c	94	526.40	1.58	831.71	
	3&4	10	6.90	175 c/c	56	386.40	0.62	239.57	2x28
	5	10	1.60	175 c/c	160	256.00	0.62	158.72	2x2x40
	6	16	3.05	175 c/c	80	244.00	1.58	385.52	2x40
	7	16	5.05	175 c/c	80	404.00	1.58	638.32	2x40
	8&9	10	6.90	175 c/c	32	220.80	0.62	136.90	2x2x8
								2795.22	

Item No	Description	Unit	No.	L	B	D	Qty.	Rate	Amount		
	Kodigehalli Main road										
	Raft width-1.80m				Wall Height-0.80m			Length-7.70 m			
		12	1.70	150 c/c	104	176.80	0.89	157.35	Top and Bottom rods for Raft 2x52		
		12	1.20	150 c/c	208	249.60	0.89	222.14	For wall Both sides 4x52		
		10	7.60	200 c/c	18	136.80	0.62	84.82	Distribution rods for Raft 2x9		
		10	7.60	200 c/c	16	121.60	0.62	75.39	Distribution rods for Walls 4x4		
								539.70			
	Mega Arts Road LHS										
	Raft width-0.80m				Wall Height-0.90m			Length-8.20 m			
		12	0.70	150 c/c	110	77.00	0.89	68.53	Top and Bottom rods for Raft 2x55		
		12	1.20	150 c/c	220	264.00	0.89	234.96	For wall Both sides 4x55		
		10	8.10	200 c/c	8	64.80	0.62	40.18	Distribution rods for Raft 2x4		
		10	8.10	200 c/c	20	162.00	0.62	100.44	Distribution rods for Walls 4x5		
								444.11			
	Mega Arts road RHS										
	Raft width-0.80m				Wall Height-0.90m			Length-9.30 m			
		12	0.70	150 c/c	124	86.80	0.89	77.25	Top and Bottom rods for Raft 2x62		
		12	1.20	150 c/c	248	297.60	0.89	264.86	For wall Both sides 4x62		
		10	9.20	200 c/c	8	73.60	0.62	45.63	Distribution rods for Raft 2x4		
		10	9.20	200 c/c	20	184.00	0.62	114.08	Distribution rods for Walls 4x5		
								501.83			
								64040.32	64.04 MT	72000.00	4610160.00
14	Supplying, fitting and placing TMT bar reinforcement in super-structure complete as per drawing and technical specifications complete as per specifications.										
Sl.No	Item/Bar nor	Dia of bar	length in mtr	spacing	no of bars	total length	wt/m	total wt in Kgs	Remarks		
a	From Ch:747.60m to 723.60m										
	Deck width - 4.50 m							Length - 24.00 m			
	10	16	5.00	75 c/c	301	1505	1.58	2377.90			
	11	16	6.40	175 c/c	130	832	1.58	1314.56			
	12	10	23.95	175 c/c	19	455.05	0.62	282.131			
	13	10	23.95	175 c/c	19	455.05	0.62	282.131			
	12	10	22.75	175 c/c	7	159.25	0.62	98.735			
	13	10	22.75	175 c/c	7	159.25	0.62	98.735			
		16	2.5	75 c/c	20	50	1.58	79	Bottom rods for desilt opening		
		16	1.4	75 c/c	20	28	1.58	44.24	Bottom rods for desilt opening		
		16	3.25	150 c/c	10	32.5	1.58	51.35	Top rods for desilt opening		
		16	2.15	150 c/c	10	21.5	1.58	33.97	Top rods for desilt opening		
		16	1.00	75 c/c	2x20=40	40	1.58	63.2	Extra rods		
		10	3.00	150 c/c	14	42	0.62	26.04	Links		
		12	1.7	150 c/c	2x10=20	34	0.89	30.26	for cover slab		
		12	1.2	150 c/c	2x11=22	26.4	0.89	23.496	Distribution rods for cover slab		
								4805.75			

Item No	Description	Unit	No.	L	B	D	Qty.	Rate	Amount
b	From Ch:723.60m to 699.60m								
	Deck width - 4.50 m							Length - 24.00 m	
	10	16	5.00	75 c/c	301	1505.00	1.58	2377.90	
	11	16	6.40	175 c/c	129	825.60	1.58	1304.45	
	12	10	23.95	175 c/c	19	455.05	0.62	282.13	
	13	10	23.95	175 c/c	19	455.05	0.62	282.13	
	12	10	22.75	175 c/c	7	159.25	0.62	98.74	
	13	10	22.75	175 c/c	7	159.25	0.62	98.74	
		16	2.5	75 c/c	20	50	1.58	79	Bottom rods for desilt opening
		16	1.4	75 c/c	20	28	1.58	44.24	Bottom rods for desilt opening
		16	3.25	150 c/c	10	32.5	1.58	51.35	Top rods for desilt opening
		16	2.15	150 c/c	10	21.5	1.58	33.97	Top rods for desilt opening
		16	1	75 c/c	2x20=40	40	1.58	63.2	Extra rods
		10	3	150 c/c	14	42	0.62	26.04	Links
		12	1.7	150 c/c	2x10=20	34	0.89	30.26	for cover slab
		12	1.2	150 c/c	2x11=22	26.4	0.89	23.496	Distribution rods for cover slab
								4795.64	
c	From Ch:699.60m to 675.60m								
	Deck width - 4.50 m							Length - 24.00 m	
	10	16	5.00	75 c/c	300	1500	1.58	2370.00	
	11	16	6.40	175 c/c	130	832	1.58	1314.56	
	12	10	23.95	175 c/c	19	455.05	0.62	282.131	
	13	10	23.95	175 c/c	19	455.05	0.62	282.131	
	12	10	22.75	175 c/c	7	159.25	0.62	98.735	
	13	10	22.75	175 c/c	7	159.25	0.62	98.735	
		16	2.5	75 c/c	20	50	1.58	79	Bottom rods for desilt opening
		16	1.4	75 c/c	20	28	1.58	44.24	Bottom rods for desilt opening
		16	3.25	150 c/c	10	32.5	1.58	51.35	Top rods for desilt opening
		16	2.15	150 c/c	10	21.5	1.58	33.97	Top rods for desilt opening
		16	1.00	75 c/c	2x20=40	40	1.58	63.2	Extra rods
		10	3.00	150 c/c	14	42	0.62	26.04	Links
		12	1.7	150 c/c	2x10=20	34	0.89	30.26	for cover slab
		12	1.2	150 c/c	2x11=22	26.4	0.89	23.496	Distribution rods for cover slab
								4797.85	
d	From Ch:675.60m to 651.60m								
	Deck width - 4.50 m							Length - 24.00 m	
	10	16	5.00	75 c/c	301	1505.00	1.58	2377.90	
	11	16	6.40	175 c/c	129	825.60	1.58	1304.45	
	12	10	23.95	175 c/c	19	455.05	0.62	282.13	
	13	10	23.95	175 c/c	19	455.05	0.62	282.13	
	12	10	22.75	175 c/c	7	159.25	0.62	98.74	
	13	10	22.75	175 c/c	7	159.25	0.62	98.74	
		16	2.5	75 c/c	20	50	1.58	79	Bottom rods for desilt opening
		16	1.4	75 c/c	20	28	1.58	44.24	Bottom rods for desilt opening
		16	3.25	150 c/c	10	32.5	1.58	51.35	Top rods for desilt opening
		16	2.15	150 c/c	10	21.5	1.58	33.97	Top rods for desilt opening
		16	1	75 c/c	2x20=40	40	1.58	63.2	Extra rods
		10	3	150 c/c	14	42	0.62	26.04	Links
		12	1.7	150 c/c	2x10=20	34	0.89	30.26	for cover slab
		12	1.2	150 c/c	2x11=22	26.4	0.89	23.496	Distribution rods for cover slab
								4795.64	

Item No	Description	Unit	No.	L	B	D	Qty.	Rate	Amount
e	From Ch:651.60m to 627.60m								
	Deck width - 4.50 m						Length - 24.00 m		
	10	16	5.00	75 c/c	300	1500	1.58	2370.00	
	11	16	6.40	175 c/c	130	832	1.58	1314.56	
	12	10	23.95	175 c/c	19	455.05	0.62	282.131	
	13	10	23.95	175 c/c	19	455.05	0.62	282.131	
	12	10	22.75	175 c/c	7	159.25	0.62	98.735	
	13	10	22.75	175 c/c	7	159.25	0.62	98.735	
		16	2.5	75 c/c	20	50	1.58	79	Bottom rods for desilt opening
		16	1.4	75 c/c	20	28	1.58	44.24	Bottom rods for desilt opening
		16	3.25	150 c/c	10	32.5	1.58	51.35	Top rods for desilt opening
		16	2.15	150 c/c	10	21.5	1.58	33.97	Top rods for desilt opening
		16	1.00	75 c/c	2x20=40	40	1.58	63.2	Extra rods
		10	3.00	150 c/c	14	42	0.62	26.04	Links
		12	1.7	150 c/c	2x10=20	34	0.89	30.26	for cover slab
		12	1.2	150 c/c	2x11=22	26.4	0.89	23.496	Distribution rods for cover slab
								4797.85	
f	From Ch:627.60m to 605.60m								
	Deck width - 4.50 m						Length - 18.00 m		
	10	16	5.00	75 c/c	221	1105.00	1.58	1745.90	
	11	16	6.40	175 c/c	93	595.20	1.58	940.42	
	12	10	17.95	175 c/c	19	341.05	0.62	211.45	
	13	10	17.95	175 c/c	19	341.05	0.62	211.45	
	12	10	16.75	175 c/c	7	117.25	0.62	72.70	
	13	10	16.75	175 c/c	7	117.25	0.62	72.70	
		16	2.5	75 c/c	20	50	1.58	79	Bottom rods for desilt opening
		16	1.4	75 c/c	20	28	1.58	44.24	Bottom rods for desilt opening
		16	3.25	150 c/c	10	32.5	1.58	51.35	Top rods for desilt opening
		16	2.15	150 c/c	10	21.5	1.58	33.97	Top rods for desilt opening
		16	1	75 c/c	2x20=40	40	1.58	63.2	Extra rods
		10	3	150 c/c	14	42	0.62	26.04	Links
		12	1.7	150 c/c	2x10=20	34	0.89	30.26	for cover slab
		12	1.2	150 c/c	2x11=22	26.4	0.89	23.496	Distribution rods for cover slab
								3606.16	
g	From Ch:605.60m to 590.60m								
	Deck width - 4.50 m						Length - 19.00 m		
		20	5.00	75 c/c	254	1270.00	2.47	3136.90	Bottom rods for Bridge portion
	11	16	6.40	175 c/c	109	697.60	1.58	1102.21	
	12	10	18.95	175 c/c	25	473.75	0.62	293.73	
	13	10	18.95	175 c/c	25	473.75	0.62	293.73	
	Bracket to rest approach slab	12	2.30	125 c/c	304	699.20	0.89	622.29	2x152
	Distribution for bracket	12	18.95	175 c/c	10	189.50	0.89	168.66	2x5
	Rings for bracket	10	1.65		184	303.60	0.62	188.23	2x92
		10	1.40		184	257.60	0.62	159.71	2x92
	Cable duct/Utility crossing	12	1.30	175 c/c	27	35.10	0.89	31.24	
		12	1.80	175 c/c	27	48.60	0.89	43.25	
	Distribution for Cable duct	12	4.80	175 c/c	10	48.00	0.89	42.72	2x5
	Parapet wall	12	2.90	175 c/c	28	81.20	0.89	72.27	
	Distribution for Parapet wall	12	4.80	175 c/c	12	57.60	0.89	51.26	2x6
								6206.19	

Item No	Description	Unit	No.	L	B	D	Qty.	Rate	Amount		
	Drain below Approach Slab										
	Slab width-1.40m						Length-7.70 m				
		12	1.40	150 c/c	104	145.60	0.89	129.58	Top and Bottom rods for Slab 2x52		
		10	7.60	200 c/c	14	106.40	0.62	65.97	Distribution rods for Slab 2x7		
	near highmast light for slab	12	1.50	150 c/c	34	51.00	0.89	45.39	Top and Bottom rods for Slab 2x17		
		10	1.50	200 c/c	14	21.00	0.62	13.02	Distribution rods for Slab 2x7		
	Near Mega Arts Slab	12	0.70	150 c/c	32	22.40	0.89	19.94	Top and Bottom rods for Slab 2x16		
		10	2.20	200 c/c	8	17.60	0.62	10.91	Distribution rods for Slab 2x4		
Precast Slabs	12	12	0.70	150 c/c	18	151.20	0.89	134.57	Top and Bottom rods for Slab 2x9		
	12	10	1.30	200 c/c	6	93.60	0.62	58.03	Distribution rods for Slab 2x3		
							Total Qty	477.41			
								34282.48	34.28 MT	72000	2467440
15	Providing 90mm dia PVC pipes 10 KSC) for wall 0.40 mtr pipe								34.27		
	Measurement Contd. on :										
	From Ch:747.60m to 717.60m	Rmt	65		0.40	26.00	26.00				
	From Ch:717.60m to 687.60m		60		0.40	24.00	24.00				
	From Ch: 687.60m to 657.60m		63		0.40	25.20	25.20				
	From Ch:657.60m to 627.60m		60		0.40	24.00	24.00				
	From Ch:627.60m to 597.60m		60		0.40	24.00	24.00				
	From Ch:597.60m to 590.60m		15		0.40	6.00	6.00				
						Total Qty	129.20	340.00	43928.00		

Item No	Description	Unit	No.	L	B	D	Qty.	Rate	Amount
16	Reinforced cement concrete M30 approach slab including reinforcement and form work complete as per drawings and technical specifications complete as per specifications.MORTH specification No.1500, 1600, 1700, & 2704 with all lead and lifts as directed by the Engineer-in-charge.								
	Measurement Contd. on :								
	For Approach slab, ORR to Kodigehalli Main road		1	5.40	(1.40+1.60)/2	(0.40+0.25)/2	2.63		
			1	5.50	(1.60+3.80)/2	(0.40+0.25)/2	4.83		
			1	7.70	12.80	(0.40+0.25)/2	32.03		
			1	1.90	12.40	(0.40+0.25)/2	7.66		
			1	21.50	(3.00+4.50)/2	(0.40+0.25)/2	26.20		770175-00
						Total Qty	73.35	10500.00	(770184.19)
17	KSRRB M2600-4 : (iii) Providing and fixing in position 20mm thick premoulded joint filler in expansion joint for fixed ends of simply supported spans not exceeding 10m to cater for a horizontal movement upto 20mm covered with sealant complete as per drawing & Technical specification complete as per specifications. MORTH specification No.2605 with all lead and lifts as directed by the Engineer-in-charge.								
	Not Operated						0.00	200.00	0.00
18	Scarifying bituminous course 50mm to 75mm thick along with premix carpet / surface dressing by manual means without disturbing the base and stacking of the debris materials within a lead of 100 mtrs including cost of all labour charges complete as per specifications. MORTH / Chapter 3 with all lead and lifts as directed by the Engineer-in-charge.								
	Measurement Contd. on :								
	For Approach slab, ORR to Kodigehalli Main road		1	9.00	13.00		117.00		
			1	4.00	13.00		52.00		
						Total Qty	169.00	60.00	10140.00
19	Scarifying stone metal crust 50mm to 100mm thick with pick axes along with premix carpet / surface dressing and stackign of old serviceable materials within a lead of 100 metres by manual means including cost of all labour charges complete as per specifications. MORTH / Chapter 3 with all lead and lifts as directed by the Engineer-in-charge.								
	Measurement Contd. on :								
	For Approach slab, ORR to Kodigehalli Main road		1	9.00	13.00		117.00		
			1	4.00	13.00		52.00		
						Total Qty	169.00	50.00	8450.00
20	Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam specification including spreading in uniform thickness, hand packing, rolling with 3 wheeled steel / vibratory roller 8-10 tonnes in stages to proper grade and camber, applying and brooming requisite type of screening / binding materials to fill up the interstices of coarse agreegate, watering and compacting to the required density complete as per specification.A by Manual means. Type A 13.2mm for grading II. MORTH Specification No.404 with all lead and lifts as directed by the Engineer-in-charge.								
	Measurement Contd. on :								
	For Approach slab, ORR to Kodigehalli Main road		1	5.40	(1.40+1.60)/2	(0.14+0.15)/2	1.17		
			1	5.50	(1.60+3.80)/2	(0.15+0.14)/2	2.15		
			1	7.70	12.80	(0.14+0.15)/2	14.21		
			1	1.90	12.40	(0.15+0.14)/2	3.42		
			1	21.50	(3.00+4.50)/2	(0.14+0.15)/2	11.69		
						Total Qty	32.64	1500.00	(48966.88)

48945-00

Item No	Description	Unit	No.	L	B	D	Qty.	Rate	Amount
21	Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam specification including spreading in uniform thickness, hand packing, rolling with 3 wheeled steel / vibratory roller 8-10 tonnes in stages to proper grade and camber, applying and brooming requisite type of screening / binding materials to fill up the interstices of coarse agreegate, watering and compacting to the required density complete as per specification.A by Manual means. Type B 11.2mm for grading III. MORTH Specification No.404 with all lead and lifts as directed by the Engineer-in-charge.								
	Measurement Contd. on :								
	For Approach slab, ORR to Kodigehalli Main road		1	5.40	(1.40+1.60)/2	(0.09+0.10)/2	0.76		
			1	5.50	(1.60+3.80)/2	(0.10+0.09)/2	1.41		
			1	7.70	12.80	(0.09+0.10)/2	9.36		
			1	1.90	12.40	(0.10+0.09)/2	2.23		
			1	21.50	(3.00+4.50)/2	(0.09+0.10)/2	7.65		36297.00
						Total Qty	21.41	1700.00	36403.72
22	Collecting, conveying and disposal of surplus / excavated earth to designated dupmping site (15.00 kms) as directed by the Engineer in charge.								
	Measurement Contd. on :								
	Total quantity excavated (50%of I No - 6)	Cum		1667.59x0.5=833.79			833.79		
	Total quantity excavated (60%of I No - 6)	Cum		127.49x0.6=76.49			76.49		
						Total Qty	910.28	100.00	91028.00
	Total Amount								15850744.42

Assistant Engineer
SWD, Yelahanka Zone
BBMP, Bangalore

Asst.Executive Engineer
SWD,Yelahanka Zone,
BBMP, Bangalore

Executive Engineer
SWD,Yelahanka Zone
BBMP, Bangalore

Technically sanctioned for Rs. 158,50,744/-
Rs One Crore fifty eight lakhs fifty thousand Seven hundred forty four only.
under CMSS Special Funds
P- 1237 Flood Management works
Registered as CE(S) 29/2015-16 Subject to conditions contained in enclosed memo No. 29/2015-16 - 7 Dt.

AE/JE TA SE (S) CE (S)